

What is claimed is:

1. A display device comprising:

a plurality of scanning signal lines juxtaposed on a substrate surface;

5 a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface; and

a video signal driving circuit connected to respective one end sides of the plurality of video signal lines, wherein

10 the plurality of pixels includes a first pixel selected by one of the scanning signal lines and a second pixel located closer to the video signal driving circuit than the first pixel and selected by another of the scanning signal lines, each of which receives a signal from one of the plurality of video signal lines sequentially in response to respective selection thereof and indicates brightness in accordance with the signal,

15 the signal is inputted to the one of the plurality of video signal lines through amplifying means from the video signal driving circuit, and

the amplifying means raises driving performance of the first pixel higher than that of the second pixel.

2. A display device according to claim 1, further comprises means for adjusting the driving performance.

20 3. A display device comprising:

a plurality of scanning signal lines juxtaposed on a substrate surface;

a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface; and

25 a video signal driving circuit connected to the plurality of video signal lines respectively, wherein

one of the plurality of video signal lines supplies a video signal to one and another of the plurality of pixels sequentially, in response to when respective one of the scanning signal lines selects either the one or the another of the plurality of pixels, the another of the plurality of pixels is located closer to the video signal driving circuit than the one of the plurality of pixels, and each of the one and the another of the plurality of pixels indicates brightness in accordance with the video signal supplied from the one of the plurality of video signal lines,

the video signal has a voltage in accordance with a tone to be displayed, the voltage is determined by and varies in accordance with a gradation forming voltage, and the gradation forming voltage is increased higher when the video signal is supplied to the one of the plurality of pixels than when the video signal is supplied to the another of the plurality of pixels.

4. A display device according to claim 3, further comprises means for adjusting the gradation forming voltage.

5. A display device comprising:
a plurality of scanning signal lines juxtaposed on a substrate surface;
a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface, each of which has a switching element and receives a video signal from one of the plurality of video signal lines when the switching element is turned on by one of the plurality of scanning signal lines;

a video signal driving circuit connected to respective ends of the plurality of video signal lines, and

a scanning signal driving circuit inputting voltage signals turning on the switching elements video to the plurality of scanning signal lines respectively, wherein

the voltage signal inputted to one of the plurality of scanning signal lines is higher than that inputted to another of the plurality of scanning signal lines located closer to the video signal driving circuit.

6. A display device according to claim 5, further comprises

5 means for adjusting the voltage signal inputted to one of the plurality of scanning signal lines with reference to the voltage signal supplied to another of the plurality of scanning signal lines located further from the video signal driving circuit than the one of the plurality of scanning signal lines.

7. A display device comprising:

10 a plurality of scanning signal lines juxtaposed on a substrate surface;

a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface; and

15 a video signal driving circuit connected to respective one end sides of the plurality of video signal lines, wherein

the plurality of pixels includes a first pixel selected by one of the scanning signal lines and a second pixel located closer to the video signal driving circuit than the first pixel and selected by another of the scanning signal lines, each of which receives a signal from one of the plurality of video signal lines sequentially in response to
20 respective selection thereof and indicates brightness in accordance with the signal,

the video signal driving circuit inputs the signal to the second pixel with larger delay than when the video signal driving circuit inputs the signal to the first pixel.

8. A display device according to claim 1, wherein

25 information on a start of frame and latch pulses corresponding to every one line of the display data are inputted to the video signal driving circuit,

the display device further comprises scanning line position measurement means counting the latch pulses according to an input of the information on the start of frame

and outputting scanning line position information,

the scanning line position information determines whether one of the plurality of pixels is located closer to the video signal driving circuit than another of the plurality of pixels, or not.

5 9. A display device according to claim 1, further comprising a display control circuit, wherein

display data including retrace periods between every pair of line data thereof are transmitted from the display control circuit to the video signal driving circuit,

10 the display control circuit transmits scanning line position information related to the respective line data in each of the retrace periods,

the scanning line position information determines whether one of the plurality of pixels is located closer to the video signal driving circuit than another of the plurality of pixels, or not.

15 10. A display device according to claim 1, further comprising a display control circuit, wherein

the display control circuit transmits pulses to the video signal driving circuit,

the display control circuit comprises means for varying widths of the pulses in accordance with scanning line position information and means for reading the scanning line position information from the widths of the pulse,

20 the scanning line position information determines whether one of the plurality of pixels is located closer to the video signal driving circuit than another of the plurality of pixels, or not.

11. A display device comprising:

a plurality of scanning signal lines juxtaposed on a substrate surface;

25 a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface, each of which has a switching element and receives a video signal from one of the plurality of video signal lines in response to an application of a scanning signal to the switching element by one of the plurality of scanning signal lines;

5 a video signal driving circuit connected to respective ends of the plurality of video signal lines, and

a scanning signal driving circuit inputting the scanning signal to each of the plurality of scanning signal lines and turning on the switching elements belonging to a group of the pixels corresponding to the each of the scanning signal lines, wherein

10 the scanning signal driving circuit has a decoder varying an output voltage of the scanning signal from the scanning signal driving circuit, the output voltage of the scanning signal decreases as the scanning signal line to which the scanning signal is applied is located closer to the video signal driving circuit.

12. A display device comprising:

15 a plurality of scanning signal lines juxtaposed on a substrate surface;

a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface, each of which has a switching element and receives a video signal from one of the plurality of video signal lines in response to an application of a scanning signal to the switching element by one of the plurality of scanning signal lines;

a scanning signal driving circuit outputting the scanning signal to each one end of the plurality of scanning signal lines, and

25 a plurality of video signal driving circuits juxtaposed along at least one of the plurality of scanning signal lines, each of the plurality of video signal driving circuits outputs the video signal to each of a group of the plurality of video signal lines corresponding to the each of the plurality of video signal driving circuits, and wherein

the video signal has a voltage in accordance with a tone to be displayed, the voltage is determined by and varies in accordance with a gradation forming voltage, and

the gradation forming voltage at when one of the plurality of video signal driving circuits outputs the video signal is dropped in comparison with the gradation forming voltage at when another of the plurality of video signal driving circuits located
5 further from the scanning signal line than the one of the plurality of video signal driving circuits outputs the video signal.

13. A display device comprising:

a plurality of scanning signal lines juxtaposed on a substrate surface;

10 a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface; and

a plurality of pixels arranged two-dimensionally on the substrate surface, each of which has a switching element and receives a video signal from one of the plurality of
15 video signal lines in response to an application of a scanning signal to the switching element by one of the plurality of scanning signal lines;

a scanning signal driving circuit outputting the scanning signal to each one end of the plurality of scanning signal lines; and

at least one video signal driving circuit outputting the video signal to each one
20 end of the plurality of video signal lines, wherein

an output of the video signal to respective one of the video signal lines is delayed sequentially as far from the scanning signal driving circuit as the respective one of the video signal lines is located.

14. A display device comprising:

25 a plurality of scanning signal lines juxtaposed on a substrate surface;

a plurality of video signal lines juxtaposed transverse to the plurality of gate signal lines;

a plurality of pixels arranged two-dimensionally on the substrate surface to form a display area, each of the pixels has a switching element and receives a video signal from one of the plurality of video signal lines in response to an application of a scanning signal to the switching element by one of the plurality of scanning signal lines;

5 an operation means to which display data are inputted; and

a video signal driving circuit outputting the video signal to each of the plurality of video signal lines on the basis of an output of the operation means, wherein

the operation means receives information related to brightness inclination in the display area, detects a portion of the display area where the brightness inclination might appear and a minimum brightness level or a brightness level closer to the minimum
10 brightness level in the portion thereof with reference to the information, and outputs a correction data decreasing the brightness of the display data in another portion thereof without a possibility of the brightness inclination and increasing the brightness of the display data in the portion thereof having a possibility of the brightness inclination to
15 compensate its brightness decrease with reference to the minimum brightness level or the brightness level closer to the minimum brightness level to the video signal driving circuit.

15. A display device according to claim 14, wherein

the operation means divides brightness range from a zero tone to another tone
20 corresponding to the minimum brightness level or the brightness level closer to the minimum brightness level into a larger number of tones than a number of tones counted up from the zero tone to the another tone, and generates the correction data corresponding to the larger number of tones.

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